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I.—Field-Notes on the Birds of Chinkiany, Lower Yangtse Basin.—Part III.* By J. D. D. LA TOUCHE, C.M.Z.S., M.B.O.U.

116. DENDROCOPUS CABANISI Malh.

Styan, Ibis, 1891, p. 482.

A common resident species, breeding in April and May. Nearly all the adults obtained by me at Chinkiang shew some spots of white on the scapulars, and all have a more or less white edging to the feathers of the lower back. The spots on the wings and the white patch on the upper wingcoverts are much larger than in Fohkien examples of this Woodpecker. The three outer pairs of rectrices are generally somewhat narrowly barred (in fact, often only spotted) with black. A young bird shot on June 10 has the longest scapulars tipped with white and the primaries broadly tipped with the same colour.

I have been unable as yet to secure any authentic eggs. Some fragments were taken on May 13 from a nest which contained young birds, and I have one egg, found on the ground on May 17 under some trees riddled with Woodpeckers' holes, which I can only refer to this species. It is

* Continued from 'The Ibis,' 1906, p. 641.

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but slightly glossy, the texture of the shell resembling that of the fragments previously obtained. It is rather narrowly ovate and measures $1.07 \times 0.80^{\prime\prime}$. This egg is quite uninjured, save for two tiny punctures. As it is unlikely that it had been laid on the ground, it had probably been carried off by a rat, which had dropped it on being disturbed by our approach.

117. IYNGIPICUS SCINTILLICEPS (Swinhoe).

Styan, Ibis, 1891, p. 482.

The Spark-headed Woodpecker is a resident with us, but is not so common as the Green and Pied species. I have scen it all the year round on the plain, but have not been able to procure any eggs. Specimens shot at Chinkiang shew more white than those from Fohkien, and the stripes on the under parts are slightly narrower.

118. GECINUS CANUS (L.).

I shot an adult female on November 30, 1902.

This district is, no doubt, the southernmost limit of this Woodpecker in Eastern China.

119. GECINUS GUERINI (Malh.).

Styan, Ibis, 1891, p. 482.

This is the commonest Woodpecker about Chinkiang. It breeds in April, but I have never succeeded in finding a nesthole with eggs.

On placing a series of Fohkien Green Woodpeckers side by side with a series of G. guerini shot at Chinkiang, it appears evident that the Fohkien bird is a well-marked and sufficiently constant form of G. guerini (Malh.), and that it may well stand as Geeinus tancola Gould. To my mind there is no more reason for uniting G. tancola Gould with G. guerini Malh, than there would be for suppressing G. guerini and calling it G. canus, or for uniting the Green Woodpecker of Fohkien with G. occipitalis. These four forms intergrade almost completely. I have a Green Woodpecker from Fohkien which I could hardly distinguish from specimens of G. occipitalis at the British Museum, and I have also specimens of G. guerini from Chinkiang which can only be distinguished from G. canus by the presence of a few black marks on the crown and nape.

Considered as a whole, however, the Fohkien birds are quite distinct from the Chinkiang birds, just as taken collectively *Gecinus guerini* is distinct from *G. canus*, and *G. tancola* of Fohkien differs from the southern *G. occipitalis*. This is proved by my series of Green Woodpeckers from Fohkien and Chinkiang.

Nearly every specimen of G. guerini obtained by me at Chinkiang is noticeably lighter in colour than those from Fohkien. The upper parts in Chinkiang birds are of a lighter green, often with a wash of grev, and the lower parts are vellowish grey-green in place of the darker green of the southern birds. The malar stripe is almost invariably smaller: in the female sometimes almost absent. In the male the crown behind the red patch is grey, streaked, generally very lightly, with black, and the nuchal spot is seldom so extensive as in Fohkien birds, being sometimes very small and brownish in colour. One bird shot on April 21 has a large black nuchal patch as in specimens from Fohkien, but there is hardly any black round the red patch, and the under parts resemble those of the normal Chinkiang bird. In the female the difference is still more strongly marked. The general coloration is very much lighter, the moustache is very slight, the head is greenish grey lightly streaked with brownish or black, and the nuchal patch is small. There is generally a trace, often well marked, of obsolete bars on the secondaries. In one of my female specimens from Chinkiang, which is dated November 17, there is no proper nuchal patch, only a few feathers of the nape being brownish black. In another, dated December 30, the crown is but faintly streaked and the nape-feathers are tipped or centred with brownish black; while the malar stripe consists of two or three blackish feathers.

The average Chinkiang bird is therefore typical G. guerini Malh., but specimens are obtained in this locality which intergrade with the northern G. canus, and sometimes, but more rarely, we find others which come very close to the southern form. On the other hand, the Fohkien Green Woodpecker is typical *G. tancola* Gould, as defined by Swinhoe (P. Z. S. 1863, p. 10) and by David and Oustalet ('Oiseaux de la Chine,' p. 53), and none of the specimeus that I have seen approach the average Chinkiang bird. Owing to want of material from the Lower Yangtse, I did not recognise the differences in my former papers on Fohkien birds, and wrongly called the Fohkien Green Woodpecker *G. guerini* Malh. It should stand as *G. tancola* Gould.

120. PICUMNUS CHINENSIS (Hargitt).

Styan, Ibis, 1891, p. 482.

On May 15, 1903, a live example of this species taken with bird-lime was sold to me by a bird-catcher. It was active and pecked hard at my fingers, but did not live. On the 29th of May of the following year I saw another individual on the plain, climbing about a large tree. Two eggs brought to me on May 17, 1904, which the guides stated had been found in a hole in a tree, are, I have no doubt, those of this Piculet. These eggs, which were a little incubated, are pure white, smooth, highly glossy, and of a round ovate shape. They measure $0.63 \times 0.51''$.

121. IYNX TORQUILLA L.

Styan, Ibis, 1891, p. 483.

I have seen the Wryneck on two occasions only: namely, on April 27, 1902, when I shot two specimens, and on September 7 following, when I shot another. In each case the birds were flushed from damp or marshy ground near water. Another was seen on the first-mentioned date in a wheat-field.

122. Upupa epops L.

Styan, Ibis, 1891, p. 482.

The Hoopoe is evidently very rare at Chinkiang. I have seen only one there (in winter), on the north bank of the river. It was very wild, and when approached flew from tree to tree across the fields. The distribution of this bird on the China coast is very irregular: at Newchwang (South Manchuria) it was very common during the summer; at

Chinkiang I saw it but once, as stated above; at Foochow it is a scarce winter visitant; at Amoy it is a very common resident; at Swatow I have never seen it.

123. EURYSTOMUS CALONYX Sharpe.

Eurystomus orientalis (L.); Styan, Ibis, 1891, p. 483.

Eurystomus calonyx Sharpe; La Touche & Rickett, Ibis, 1905, p. 48.

This species passes in May, September, and October. I do not think that it breeds about Chinkiang. The collectors shot a female in very bright plumage on May 20.

124. ALCEDO BENGALENSIS Briss.

Styan, Ibis, 1891, p. 483; La Touche & Rickett, Ibis, 1905, p. 50.

Abundant and resident. On May 6 I took six eggs from a hole in the bank of a pond; on May 12 and June 16 I bought three and six eggs from natives. The latter were incubated. Nine eggs average $0.82 \times 0.70''$, the largest measuring $0.84 \times 0.71''$ and the smallest $0.80 \times 0.70''$.

125. HALCYON PILEATUS (Bodd.).

Styan, Ibis, 1891, p. 483; La Touche, Ibis, 1900, p. 44. Heard in May and seen in September.

126. ACANTHYLLIS CAUDACUTA (Lath.).

Chætura caudacuta (Lath.); Styan, Ibis, 1891, p. 481.

These beautiful Swifts appear to pass regularly in May. On May 13, 1901, Mr. E. G. Byrne, of this port, shot one from a flock of about twenty which he met with in the plain while Snipe-shooting. A few days afterwards he noticed others flying about the summits of our highest hills. On May 25, 1902, the collector Wang Wang and I each shot one on the same hills. There were quite a number flying about the hill-tops and several came within gun-shot. The two which we shot were females, and measured in the flesh 8:35 and 8 in. in length. They were very fat, and the stomach of one was crammed with fragments of a large species of bug (? *Eusthenes* sp.); that of the other was equally full of insects (a kind of gold-coloured weevil). The collectors saw these Swifts several times during May, but always high in the air and out of range. They declared that these were the "Swallows" which occur at Kuatun in summer (see 'Ibis,' 1899, p. 431). In September, 1904, a number were seen flying over the paddy-fields.

127. CYPSELUS PACIFICUS Lath.

Styan, Ibis, 1894, p. 334.

I have occasionally observed Swifts which were probably of this species. On August 29, 1902, I saw a number of large Swifts—no doubt *C. pacificus*—going S.E. before a storm. They were in company with Swallows.

128. CAPRIMULGUS JOTAKA T. & S.

Styan, Ibis, 1891, p. 481; La Touche, Ibis, 1900, p. 41; La Touche & Rickett, Ibis, 1905, p. 50.

This species is very common in April and May in woods on the hills, and is also seen flying over the paddy-fields at dusk. It passes again in September.

129. Cuculus canorus L.

Styan, Ibis, 1891, p. 484.

The Common Cuckoo arrives towards the middle of May, and at the end of that month and during June is extremely abundant. I have often seen several individuals flying together, calling and pursuing one another. It may be heard until the end of July, but I have not noticed it in autumn.

The common form at Chinkiang is the pale variety with white narrowly barred under parts. Its call is the same as that of the European bird—"kook-koo" or "kookook koo." I have also a male, shot on May 26, which has dark upper parts. The under parts in this specimen are tinged with buff, the under tail-coverts are buff, and it has broad bars set widely apart. The wing measures 8:25 in., so that the bird is too large for *C. intermedius*. Another example, shot on May 13, is precisely similar to typical *C. intermedius* in all but size, the wing measuring 8:15 in. A number of examples of the common pale form, shot at Chinkiang, vary in length of wing from 7:75 to 9:2 in. (males) and from 7:8 to 8:85 in. (females). A Cuckoo sent me from Anhwei province by the Rev. Father Perrin, S.J., belongs to this pale form of *C. canorus*.

I have four eggs taken at Chinkiang which I attribute to C. canorus. One was brought to me on June 20, 1900, in a new nest of Suthora webbiana which contained no other egg. It is broadly ovate in shape and has a greenish creamy ground-colour. It is covered with specks, spots, and blotches of burnt signna and reddish purple over pale purple underlying spots. The markings form an irregular ring round the larger end and are often confluent. It measures $0.84 \times$ 0.65". The second egg was brought to me on June 6 of the following year, with a number of other specimens. I think that it had been found in a nest of Pycnonotus sinensis. It is of a long ovate (nearly oval) form, and a light vellowish green colour, with a well-marked ring of very dark burnt sienna, and bright violet spots and specks over underlying violet spots. It has also a few speeks of burnt sienna and violet over the rest of the egg. It measures $0.87 \times 0.63''$. The other two eggs were brought to me on June 20 and June 28, 1903, in nests of Cisticola cursitans, which contained, besides, two and five eggs respectively. These eggs, one of a long oval-ovate and the other of an oval-ovate shape, are light grevish green, spotted, chiefly on the broad half of the egg, with bright burnt sienna and purple over paler purple underlying shell-spots. The markings are generally large and irregular in shape. They measure $0.88 \times 0.60^{\prime\prime}$ and 0.87 × 0.65".

Considering the numbers of nests of Acrocephalus orientalis which I have seen, it is strange that I should not have found a single Cuckoo's egg in any of them. The Cuckoos were always to be heard and seen about the reed-beds, and were certainly breeding there. The fact that I did not obtain any specimens was, I suppose, due to ill-luck.

130. CUCULUS INTERMEDIUS Vahl.

Cuculus striatus Vahl; Styan, Ibis, 1891, p. 484.

Cuculus intermedius Vahl; La Touche, Ibis, 1898, pp. 360, 370; 1900, p. 45.

The collectors shot eight specimens of this Cuckoo between

the 19th and the 28th of May, 1902, so that it must have been comparatively common that year. I did not shoot any myself, and have not heard its familiar call. These eight specimens are, in all but size, exactly similar to my series from Formosa and Fohkien.

Formosa a	nd Fol	kien bir	ds	б	wing	7.2	to	7.75	in.
,,	57	29		9	,,,	6.82	22	7.5	,,
Chinkiang	birds	• • • • • •		3	"	7.75	"	8	22
,,	99			4	22	7.55	"	8	"

If these Chinkiang dark Cuckoos are all C. intermedius, then this species intergrades in size at Chinkiang with C. canorus. It seems strange that while the individuals obtained in the south are all small, none exceeding 7.75 in. in wing-measurement, several of those shot at Chinkiang are quite as large as average examples of the small pale race of C. canorus. The difference is specially apparent in female specimens, as will be seen from the above measurements.

131. CUCULUS POLIOCEPHALUS Latham.

Cuculus poliocephalus Dav. & Oust. Oiseaux de la Chine, p. 66.

This small Cuckoo is common on the hills in the latter half of May. It probably summers here at the higher elevations in suitable wooded spots. Its call, which is very loud, is composed of six syllables, and is repeated three times in succession, each time in a different tone, the second being very emphatic and the third weak and plaintive.

132. CUCULUS MICROPTERUS Gould.

Styan, Ibis, 1891, p. 484.

This Cuckoo is abundant in May and June, frequenting large trees and thickets on the plain rather than wooded hills. It is very vociferous and readily answers when anyone imitates its call, which may be syllabled "kwi-kwohkwok" and "kwikwi-kwohkwok." A female which I shot on May 26, 1901, had an egg ready for laying in the oviduct; unfortunately it was smashed to bits by the shot. In colour it was pinkish white, with round specks and spots of rich red and deep carmine about the larger end, the rest of the shell having only a few isolated spots. The general appearance, so far as could be judged from the fragments, was somewhat like that of some eggs of *Buchanga leucogenys*.

133. HIEROCOCCYX SPARVERIOIDES (Vig.).

Hierococcyx fugax (Horsf.); Styan, Ibis, 1891, p. 484.

Hierococcyx sparverioides (Vig.); Styan, Ibis, 1899, p. 288.

This large Hawk-Cuckoo arrives at the end of April, and may be heard calling in the woods on the hills throughout May. I do not think that it remains during the summer.

134. Coccystes coromandus (L.).

Styan, Ibis, 1891, p. 484.

This Crested Cuckoo summers on the wooded hills about Chinkiang. It is not rare, but is extremely shy. The collectors shot one on May 12, and I saw another on June 20. The call is dissyllabic and may be written "kük-kük."

135. Bubo ignavus (Forster).

Styan, Ibis, 1891, p. 485.

A resident species. It is said by natives to nest on ledges of rocks on the highest hills. A young bird was brought to me on April 20.

136. Scops semitorques T. & S.

Styan, Ibis, 1891, p. 485.

Styan mentions this Owl as having been taken at Chinkiang. I have never seen it there.

137. Asio otus (L.).

Styan, Ibis, 1891, p. 486.

A specimen of this Owl, shot on April 5, was given to me by a friend. It is a female; the largest ova were about the size of a No. 6 shot.

138. Asio accipitrinus (Pall.).

Styan, Ibis, 1891, p. 486.

I have a specimen of the Short-eared Owl shot in autumn by a friend.

139. GLAUCIDIUM WHITELYI (Blyth).

Styan, Ibis, 1891, p. 485; La Touche & Rickett, Ibis, 1905, p. 52.

On May 29, 1904, I shot two young birds not long out of the nest. I had never before identified this species with certainty at Chinkiang, but I had seen in the woods on one or two occasions small Owls which may have belonged to it. It is probably a very scarce resident in this part of the Lower Yangtse basin.

140. NINOX SCUTULATA (Raffles).

Styan, Ibis, 1891, p. 486.

I shot one example on May 26, and the collectors another on April 29.

141. PANDION HALIAËTUS (L.).

Styan, Ibis, 1891, p. 486.

I believe that I have once seen the Osprey flying over the Chinkiang hills.

142. CIRCUS CYANEUS (L.). Styan, Ibis, 1891, p. 487. Occurs in winter.

143. CIRCUS ÆRUGINOSUS (L.). Styan, Ibis, 1891, p. 486.

I believe that I have seen the Marsh-Harrier during winter, but I did not obtain any specimens.

144. CIRCUS SPILONOTUS Kaup. Styan, Ibis, 1891, p. 486. Not uncommon in winter.

145. CIRCUS MELANOLEUCUS (Forster).

Styan, Ibis, 1891, p. 486.

I have on one or two occasions seen a Harrier which appeared to be of this species.

146. BUTEO PLUMIPES (Hodgs.). Styan, Ibis, 1891, p. 487. Common in winter. 147. BUTEO HEMILASIUS T. & S.

Styan, Ibis, 1891, p. 487.

Seen in winter flying over bare reed-fields. I have a fine example shot at Ngankin (Anhwei Province) by Mr. A. L. Pichon, Imp. Mar. Customs Service.

148. AQUILA CLANGA Pall.

Styan, Ibis, 1891, p. 487.

The first intimation that I had of Eagles breeding at Chinkiang was on May 5, 1901, when the local pig-trackers brought me a very richly-coloured Eagle's egg, taken from an eyrie situated on one of the highest hills in the neighbourhood. On May 11 of the following year I sent the Folkien collectors to the cyrie, where they found two eggs and shot the female. The nest, made of sticks and lined with fresh tufts of pine, was on a ledge on the precipitous side of the hill, which is here a perpendicular rocky wall some thirty or forty feet high, rising abruptly from the steep slope below it. The ledge was, however, easily accessible from above, being only a short way down from the top of the hill. It was backed by a wall of rock some ten feet in height and overshadowed by a small tree (Rhus sp.) which grew from the back. The egg obtained on May 5, 1901, is broad and almost oval in shape and measures $2.55 \times 2.07''$. The ground-colour is greenish white; it has an irregular cap of reddish-brown (almost madder-brown) confluent blotches on the smaller end, with spots and speeks of the same colour on the rest of the shell. It was slightly incubated. One of the eggs taken on May 11, 1902, is very like the former, but the cap is on the larger end, and there are large longitudinal splashes over the greater part of the shell. In shape it is oval-ovate and it measures $2.66 \times$ 2.08". The other egg of the clutch is of a long oval-ovate shape and measures $2.70 \times 2.05''$. It has a large cap of washed-out red and violet on the larger end extending halfway down one side. The rest of the shell is spotted and splashed with the same washed-out red and violet. These eggs were also a little incubated.

The female shot by the collectors agrees well in measurements with a bird in spotted plumage from Foochow.

I do not know whether this species is common or not. The only Eagle noticed near Chinkiang in winter is H. albicilla, but a few miles further up the river I have seen another kind, though too far off to identify. The Chinkiang eyrie was deserted after the death of the female, but as in the following year I saw Eagles circling over the hill, they probably continued to breed in the neighbourhood.

149. HALIAËTUS ALBICILLA (L.).

Styan, Ibis, 1891, p. 488.

Often seen soaring over the flooded paddy-fields during winter.

150. MILVUS MELANOTIS T. & S.

Styan, Ibis, 1891, p. 490; La Touche & Rickett, Ibis, 1905, p. 54.

This species is abundant and resident. It breeds in April and May, the nests at Chinkiang being often placed in casily accessible situations. Many pairs build in the pinewoods, and I have also taken eggs from ledges of rocks on the tops of the hills. I have two obtained from a nest built in the chimney of a foreign house on the Concession. Eggs taken at Chinkiang are, like those from Foochow, very variable.

151. Astur cuculoides (Temm.).

Styan, Ibis, 1891, p. 488.

An adult male which I shot on May 12 resembles examples in the British Museum. It has very little red on the under parts, and the axillaries and under wing-coverts are pure white. Its stomach contained lizards. The testes were well developed. Small Hawks of this or the following species were numerous on the day when I shot this example.

152. ASTUR SOLOËNSIS (Lath.).

Styan, Ibis, 1891, p. 488.

A very handsome series of this small Goskawk, consisting of an adult male, three adult females, and three young

males assuming the adult dress, was shot by the collectors on May 10, 13, 14, 16, and 19. The species appears to be common during that month, but I have not noticed it in summer. All these seven birds have the under wing-coverts and axillaries more or less tinged with buff, and the females are suffused with rusty red all over the under parts. The soft parts, &c., of a young male shot on May 19 are :— Iris dark orange blotched with brown; cere orange; base of bill bluish; culmen and nearly all the upper mandible greyish brown; legs orange. Wing 7:45 in. Total length 11:3 in.

153. Accipiter NISUS (L.).

Styan, Ibis, 1891, p. 488.

Common from September to April.

154. Accipiter gularis T. & S.

Accipiter nisoides Blyth; La Touche, Ibis, 1898, p. 372.

An adult male and an adult female were shot on May 7 and 9 by the collectors.

Soft parts, &c., are—Male: Iris crimson; cere, rim of cyclids, and legs yellow; bill blue, tipped with blackish. Wing 6.4 in.; 4th primary longest, 3rd and 5th primaries nearly equal. Total length 10.55 in.

Female: Legs yellow. Wing 7.65 in.; 4th primary longest, 3rd primary intermediate between 4th and 5th.

On October 21, 1904, I bought from a native what appeared to be a young female of this species. This bird, which I brought back to Europe, has since died in London at the Zoological Gardens. It had been trained to catch birds and was extremely gentle and tame. Its iris and feet were yellow. I unfortunately neglected to take measurements, but it seemed to agree well with a young female obtained in Formosa.

155. FALCO COMMUNIS (Gm.).

Styan, Ibis, 1891, p. 489.

Common in winter up to at least the end of April. This species or F. peregrinator probably breeds here.

156. FALCO SUBBUTEO L.

Styan, Ibis, 1891, p. 489; La Touche & Rickett, Ibis, 1905, p. 55.

Passes in May and September, at which periods it is to be seen circling over the hills.

157. FALCO REGULUS Pall. Styan, Ibis, 1891, p. 489. Fairly common in winter.

158. CERCHNEIS SATURATA (Blyth).

Falco tinnunculus saturatus (Blyth); La Touche, Ibis, 1900, p. 48.

Cerchneis saturata (Blyth); Grant, Ibis, 1900, p. 601.

This dark Kestrel is a common resident in our part of the Lower Yangtse Valley. It breeds every year at, or quite close to, Chinkiang, but I was only able to procure the eggs once. In 1903 a pair established themselves in a circular niche in the wall of a foreign house on the British Concession. They took possession of this spot in March, and on the 5th of April following one egg had been laid. On the 11th of April there were four eggs. The niche where the birds were nesting was closed at the back by a disk of wood and was easily reached from the verandah. When I went up to the nest the female was sitting, quite undisturbed by the sound of voices in the verandah, but flew off when the back of the hole was gently tapped. Three of the eggs were lying close together, and the fourth a little further off. The building-material consisted of a very small quantity of paper in little crumpled bits, probably used to prevent the eggs from rolling out. The occupier of the house would not allow me to take the whole clutch, as he wished the birds to continue to breed there, so I took two eggs, depositing in their place a small hen's egg. On leaving the house I saw the Falcon return to her eggs holding something in her bill. She perched for a short time on the edge of the niche screaming violently, then flew off, and a few minutes after was preening her feathers unconcernedly on a neighbouring roof. She was sitting again

that afternoon and subsequently laid another egg; but the nest came to grief some time afterwards, and the birds left. They were about the Concession the following year, and were said to have made trial of a Magpie's nest in a tree on the Bund, but they did not remain, and bred somewhere out of the town.

One of the eggs taken has the ground-colour white, very thickly covered and almost obscured by speeks and spots of pale brick-red. Over this there are speeks, spots, and blotches of deep blood-red of several shades. It is ovate, with blunt and rounded apex, and measures $1.61 \times 1.30''$. The other egg is speekled, mottled, and blotched with deep brownish red of several shades, and is browner than the first. It is oval-ovate in shape and measures $1.62 \times 1.30''$. The two eggs left in the niche resembled the latter.

I have five examples of this Kestrel from the district an adult male shot at Nanking in winter by M. Lequerré, a French naval officer; an adult male shot by me in winter at Chinkiang; and two females and an immature male also shot at Chinkiang in summer and autumn. One of these females has the crown and nape of a uniform dark brown colour, the interscapular region and back also dark brown, with a very few inconspicuous buffish-red incomplete bars or spots; the wing-coverts, scapulars, and tertiaries of a slightly lighter brown, with a few narrow and incomplete bars of buffish red. The other female, also a very dark bird, is more regularly and closely barred with reddish.

Three live birds seen in the possession of natives, and all the wild birds seen at sufficiently close quarters, appeared to me to be also dark birds. I have never seen at Chinkiang the European *C. alaudarius* or the South Chinese and Japanese *C. japonicus*. A few individuals of the former visit Fohkien in winter, and the latter is the common form of Kestrel there during the cold season.

159. ERYTHROPUS AMURENSIS GURNEY.

I have an adult male shot on April 27, 1901, by Mr. Gibson, R.N., then a midshipman on H.M.S. 'Dido.' It is the only specimen that I have seen from Chinkiang. This

Falcon strays down to Fohkien, where Rickett and I each procured an example, as noted in the 'Ibis' (1903, p. 218).

- 160. TURTUR RUPICOLA (Pall.).
 - Styan, Ibis, 1891, p. 498; La Touche & Rickett, Ibis, 1905, p. 57.

Abundant and resident, appearing in flocks on the plain during winter. It breeds throughout the spring and probably right through the summer. Nine eggs taken on April 25, May 5 and 14, and July 11 and 13 average $1.32 \times 0.97''$. They range in length from 1.29'' to 1.36'', and in breadth from 0.95'' to 1''. The eggs of this Dove are oval, generally with one end pointed.

161. TURTUR CHINENSIS (Scop.).

Styan, Ibis, 1891, p. 498; La Touche & Rickett, Ibis, 1905, p. 57.

Abundant and resident. I have obtained eggs all through the spring and summer. On May 24 I found a Dove of this kind sitting on two much-incubated eggs in an old nest of *Dryonastes perspicillatus* placed on a bamboo some twelve feet above the ground. A nest with two fresh eggs, found on May 29, was built in the upright fork formed by the two main boughs of a tree. It was fully exposed to view and was practically suspended between the two branches.

162. Phasianus torquatus (Gm.).

Styan, Ibis, 1891, p. 499.

The Ring-necked Pheasant is still abundant in some favoured localities near Chinkiang, but the native pothunters and the peasants have almost extirpated it in the near neighbourhood of the eity by shooting it during close time and taking the eggs. Pheasants found above Chinkiang at a place called Icheng, on the north bank of the river, nearly always have the white ring perfect, the rump and upper tail-coverts clear greyish green, and the tail very long and narrowly barred. Those shot about Chinkiang and below nearly always have the white ring incomplete and the tail generally coarsely barred. One example shot near Chinkiang has a buff-coloured ground to the scapulars.

On July 30 I found a deserted nest on some marshy ground in the plain. It was a pad of rushes placed on the soil in a sedge-field. A tuft of grass was bent over so as to conceal it and form a shelter. Part of the shell of one egg, which had probably been eaten by rats, lay a few feet from the nest, inside of which were two fresh eggs, one of which had marks of the robbers' teeth in the shape of small punctures. Both these eggs are very small $(1.55 \times 1.27'')$ and $1.49 \times 1.28'')$; their colour is pale olive-buff.

Another nest was shown to me on June 26, on the loëss hills. It was merely a hollow in a strip of long grass adjoining a tennis-court in the Recreation Ground. The herbage growing around had been drawn over and locked together, so as to form a dome or roof over the eggs, which were seven in number and quite fresh. As the nest was known to a lot of native boys, and there was no chance of its being left undisturbed, I took the eggs. Three are pale buff and four pale olive-buff, all of a pointed-ovate shape. They average $1.78 \times 1.28''$: the largest is $1.80 \times 1.30''$ and the smallest $1.75 \times 1.27''$. There are evidently two broods in a season about Chinkiang.

163. COTURNIX COMMUNIS BONN. Styan, Ibis, 1891, p. 500.

164. COTURNIX JAPONICA Cassin.

La Touche & Rickett, Ibis, 1905, p. 59.

Both the common and the Japanese form of the Quail are abundant about Chinkiang in autumn and winter, and probably a few individuals remain to breed *.

165. TURNIX BLANFORDI Blyth.

Styan, Ibis, 1891, p. 500.

This species summers at Chinkiang and is very abundant in the early autumn. A female shot on May 19 had finished laying eggs, so that the first broods are probably hatched early in June. Two females shot on August 16 and September 7 each contained a large soft ovum, measuring in one case about 0.60'' and in the other about 0.40'' in diameter.

* Partridges of any kind are unknown at Chinkiang. SER. IX.-VOL. I. C

One year a woodcutter brought to me on June 13 a number of eggs, of which four are undoubtedly those of this bird and bear a close resemblance to some of the eggs of Turnicidæ figured in the 'Catalogue of Eggs in the British Museum,' vol. i. pl. viii. These four specimens are of a broad pyriformovate or peg-top shape. The ground-colour is grevish white and they are very thickly speckled with reddish brown and purple of various shades over paler purple underlying spots. In three the deeper purple spots are large, scanty, and very dark, in one of them forming an irregular ring round the large end, and in the two others scattered all over the shell. They measure $1.01 \times 0.86''$ (two eggs), $1.05 \times 0.86''$, and $1.06 \times 0.86''$. The texture is very smooth and glossy. So far as I can remember, the finder told me that he had found them on the ground. Two other eggs, both very stale, brought to me on July 11, and declared to be Quail's eggs, are very similar to the former, but perhaps still more finely speckled : they measure $1.03 \times 0.84^{\prime\prime}$ and $1.03 \times 0.86^{\prime\prime}$.

166. RALLUS INDICUS Blyth.

Styan, Ibis, 1891, p. 500.

The Indian Water-Rail is probably a resident. I have two specimens, both males, shot on December 21 and January 31, and have seen a third, shot on December 7.

167. Hypotænidia striata (L.).

Rallus jouyi Stejneger; Styan, Ibis, 1891, p. 500.

One specimen from Chinkiang was seen by Styan. I have not met with this Rail there. Two or three examples have been shot at Foochow, one of which is in my collection. It seems an uncommon bird in Eastern China.

168. PORZANA PAYKULLI (Ljungh).

Porzana mandarina Swinhoe, Ann. & Mag. Nat. Hist. 1870, v. p. 173.

Rallina mandarina Sw.; Styan, Ibis, 1894, p. 335.

Limnobænus paykulli Sharpe, Cat. B. xxiii. p. 149.

A fine male example of this Rail was shot by the collectors on May 21, and a young female was brought to me alive on September 21. I kept the latter for ten days in a cage

darkened on three sides. It soon ate chopped raw meat freely, but as it did not become tame and I feared that it would escape, I chloroformed it and preserved the skin.

The soft parts, &c., of these birds were :--

♂. May 21, 1902.—Iris light vermilion. Rim of eyelid orange-vermilion. Bill greenish plumbeous, shot or washed with blue and greenish blue, greenish along culmen. Legs light orange-vermilion. Claws horn-coloured. Bill 1 in.; wing 5.05 in.; tail 2.50 in.; tarsus 1.70 in.: total length 10.60 in.

♀. September 21, 1903.—Iris light greenish hazel. Bill greenish grey, upper mandible and point of the lower horn-coloured. Legs dull greenish, with a tinge of pink. Bill 0.80 in.; wing 4.85 in.; tail 2.20 in.; tarsus 1.60 in.: total length 9.90 in.

169. PORZANA FUSCA (L.).

Porzana erythrothorax T. & S.; Styan, Ibis, 1891, p. 501.
Amaurornis fuscus (L.); La Touche & Rickett, Ibis, 1905,
p. 59.

I shot one specimen of this species by a stream in the hillcountry on April 28.

170. PORZANA PUSILLA Pall.

Porzana pygmæa Naum.; Styan, Ibis, 1891, p. 501. Porzana pusilla Pall.; Styan, Ibis, 1894, p. 336. Passes in April and May and again in October.

171. AMAURORNIS PHENICURA (Forst.).

Gallinula phænicura (Penn.); Styan, Ibis, 1891, p. 501. Amaurornis phænicurus (Forst.); La Touche & Rickett, Ibis, 1905, p. 59.

Extremely common during summer. I took on June 21, 1903, six hard-sat eggs from a nest of dry flags placed on the top of a pollard willow growing in water by the bank of an island in a large pond. On May 29 of the following year I took six slightly incubated eggs from a nest placed in a hedge, in the middle of a hibiseus and honeysuckle bush. Besides these I have a clutch of six slightly incubated eggs, brought to me by a native on June 23, and said to have been taken from a nest placed among reeds. I also obtained four fresh eggs on June 2, and two, equally fresh, on July 10.

172. GALLINULA CHLOROPUS (L.).

Styan, Ibis, 1891, p. 501.

The Common Water-hen breeds in numbers in the flooded fields and reed-beds on both sides of the river. A few individuals probably pass the winter here, as I have a young bird shot on December 21.

173. GALLICREX CINEREA (Gm.).

Styan, Ibis, 1891, p. 501; La Touche & Rickett, Ibis, 1905, p. 60.

The Water-Cock is extremely abundant during summer. It breeds among the reeds. I was unable to take any nests myself, but obtained three clutches of four, six, and five eggs on July 11 and 18. Two of the eggs of the first clutch were stale, the others fairly fresh; these are of the glossy variety with red and pale purple spots. The other two clutches were respectively slightly incubated and nearly fresh; they belong to the less glossy reddish variety and are covered with numerous large splashes of yellowish red, with very few purple underlying spots. These fifteen eggs average $1.68 \times 1.23''$; the largest is $1.76 \times 1.29''$ and the smallest $1.62 \times 1.26''$; the narrowest diameter is 1.16''.

174. FULICA ATRA L.

Styan, Ibis, 1891, p. 501.

This Coot is common in winter and sometimes remains to breed. On June 19 nine eggs were given to me, and I obtained another on July 13. All of them were quite fresh. They range in size from $2^{\cdot}17 \times 1^{\cdot}54''$ to $1.93 \times 1.40''$.

175. Hydrophasis chirurgus (Scop.).

Styan, Ibis, 1891, p. 502.

The Water-Pheasant appears about the end of May and is very abundant during summer on the south bank of the river about flooded fields and reed-beds. I do not remember having seen it on the north bank of the river. The end of June and July seem to be at Chinkiang the time during

which the eggs are laid. The birds appear to leave very early, and when going over their breeding-grounds in September I did not see a single individual.

I did not take any eggs myself during my two nestingseasons at Chinkiang, but procured some through my collectors. On the 5th of July I bought a clutch of three, a little incubated, on the 8th a clutch of four, on the 10th two a little incubated, on the 20th four also incubated, and on the 26th one nearly fresh.

All these are of the usual flat-ended peg-top shape, and range in colour from yellowish olive to deep bronze. Fresh or nearly fresh eggs are intensely smooth and glossy, but the gloss seems to wear off as incubation proceeds. Thirteen eggs average 1.38×1.05 ', and range in length from 1.30 to 1.47'', in breadth from 1.03 to 1.09''.

176. VANELLUS CRISTATUS Wolf & Meyer.

Styan, Ibis, 1891, p. 504.

Common enough during winter.

177. CHETTUSIA CINEREA (Blyth).

Lobivanellus cinereus Blyth; Styan, Ibis, 1891, p. 503.

Chettusia cinerea (Blyth); La Touche & Rickett, Ibis, 1905, p. 61.

Appears in February. A fair number breed in the country round about Chinkiang. A pair seen on May 19 flying about a wheat-field had eggs or young, probably the latter. The birds flew over the field, coming at times quite close to me and screaming harshly all the time. A clutch of three eggs given to me on May 6, and another, also of three eggs, bought from a native on May 19, resemble the figure of the egg of this species in the 'Catalogue of Eggs in the British Museum.' They are olive-buff, more or less heavily spotted and blotched, chiefly at the larger end, with blackish brown over dull purplish-grey underlying spots and blotches. The shape is somewhat pyriform-ovate with pointed or clse slightly rounded apex. The eggs of the first clutch measure $1.80 \times$ 1.35'', $1.87 \times 1.38''$, and $1.90 \times 1.37''$; those of the second $1.80 \times 1.33''$, $1.82 \times 1.32''$, and $1.83 \times 1.35''$.

- 178. SQUATAROLA HELVETICA (L.).
- Styan, Ibis, 1891, p. 503.

I have occasionally seen bunches of this Plover being hawked about the streets in winter.

179. ÆGIALITIS PLACIDUS (Gray).

Styan, Ibis, 1891, p. 503.

Not uncommon during winter. Small parties are to be seen in early spring.

 ÆGIALITIS MINOR Wolf & Meyer. Styan, Ibis, 1891, p. 503.
 Common in spring.

181. RECURVIROSTRA AVOCETTA L. Styan, Ibis, 1891, p. 504.A few winter in the district.

182. NUMENIUS LINEATUS Cuv. Styan, Ibis, 1891, p. 508.

A solitary Curlew seen on the river-banks on February 15 was probably of this species.

183. TOTANUS GLOTTIS L. Styan, Ibis, 1891, p. 507. Fairly common in winter.

184. TOTANUS CALIDRIS (L.). Styan, Ibis, 1891, p. 507.

185. TOTANUS FUSCUS (L.).

Styan, Ibis, 1891, p. 507.

I once met a man hawking bunches of these two species of Sandpipers.

186. TOTANUS OCHROPUS (L.).

Styan, Ibis, 1891, p. 506.

Very common during winter on banks of creeks and ponds. I have, on one or two occasions, seen it at the end of July, and suspect that a few individuals may breed in the district *.

* During the five years that I spent at Chinkiang I never saw a single example of the Common Sandpiper (*Tringoides hypoleucus*).

187. TOTANUS GLAREOLA (L.). Styan, Ibis, 1891, p. 507. Common in March in wet fields.

188. Scolopax rusticula L.

Styan, Ibis, 1891, p. 504.

Woodcocks are common during the winter in suitable localities both on the hills and on the plain. As remarked by Styan, they are seen very late in the spring and it may be that some remain to breed: I saw one on the hills on April 26, and the collectors put up three in the same range on May 15 and 16.

189. GALLINAGO SOLITARIA (Hodgs.).

Styan, Ibis, 1891, p. 504.

I procured three examples at Chinkiang. One, which had been shot somewhere up the Grand Canal, was sent to me in December, 1900, by Mr. E. Starkey, of Chinkiang; on January 9, 1901, I found a second specimen among a heap of wild Doves in a shop on the Concession; the third was shot by Mr. L. Rocher, then Commissioner of Customs at Chinkiang, on November 9, 1904, on the hills near Icheng.

This species is probably less rare than is usually thought, and is often taken for a "young Woodcock."

190. GALLINAGO MEGALA Swinhoe. Styan, Ibis, 1891, p. 505.

191. GALLINAGO STENURA (Bp.).

Styan, Ibis, 1891, p. 504.

Chinkiang is not a good locality, as a rule, for Swinhoe's or the Pin-tailed Snipe, as the ground is generally either too dry or too wet. The Pintail Snipe seems to be more abundant than *G. megala* and appears earlier on the autumn migration, which begins about the first days of August, while I have shot *G. megala* as late as October 8. In spring both species are most abundant in May.

192. GALLINAGO CŒLESTIS Frenzel.

Styan, Ibis, 1891, p. 505.

Abundant on suitable ground from the end of September to May.

193. RHYNCHÆA CAPENSIS L. Styan, Ibis, 1891, p. 505.

I have seen specimens shot in August and September.

194. LARUS CANUS L. Styan, Ibis, 1891, p. 508.

195. LARUS MELANURUS T. & S. Styan, Ibis, 1891, p. 508.

196. LARUS CACHINNANS Pall. Styan, Ibis, 1891, p. 508.

197. LARUS RIDIBUNDUS L. Styan, Ibis, 1891, p. 508.

The Common and the Black-tailed Gull are to be seen every winter on the river among the shipping. I have also seen large Gulls which were either *L. cachinnans* or *L. vegæ*. Perhaps both these species occur, *L. vegæ* being a very common Gull on the coast. The Laughing-Gull seems very rare at Chinkiang. I have never noticed it in the harbour. Two or three small Gulls noticed in spring by a lagoon were probably of this species.

198. Sylochelidon Caspia (Pall.).

Styan, Ibis, 1891, p. 509.

I have once or twice seen a large Tern on the river which appeared to be of this species.

199. Hydrochelidon hybrida (Pall.).

Styan, Ibis, 1891, p. 509.

I saw on July 10, 1903, a pair of these Terns flying over a flooded field.

200. PHALACROCORAX CARBO L.

Styan, Ibis, 1891, p. 491.

Abundant in winter. The birds roost on a steep rock by Silver Island, and during the day are found on the ponds in the plain. I do not know where they breed.

The natives here, as elsewhere in China, use Cormorants for fishing-purposes on the ponds and creeks. A small boat, not a raft as in the south, is used. The birds are carried on square perches resembling falconer's cadges. The fisherman suspends two of these cadges from the ends of a carryingpole and slings them on his shoulder. Another man follows, carrying the boat on his head.

201. Ardea cinerea L.

Styan, Ibis, 1891, p. 491; La Touche & Rickett, Ibis, 1905, p. 64.

Very common in winter. Some breed in the district, as I have seen the birds in July, and once a nest was pointed out to me as being that of this Heron.

202. ARDEA PURPUREA L. Ardea purpurea L.; Styan, Ibis, 1891, p. 491. Seen by the collectors on April 24.

203. Herodias garzetta (L.).

Styan, Ibis, 1891, p. 492.

I did not see a single Lesser Egret or, in fact, White Herons of any kind at Chinkiang, but I have two eggs of *H. garzetta* brought to me on June 28 which, I was told, had been taken from a heronry situated somewhere on the north bank of the river.

204. ARDEOLA BACCHUS Bp.

Ardeola prasinosceles Swinhoe; Styan, Ibis, 1891, p. 492. This Heron is common in summer, breeding in June and

July. I have a number of eggs, taken chiefly, I believe, from a heronry on the north bank of the river which I visited one year on June 16. This heronry was in a thick belt of low bamboos in a private compound of considerable extent enclosed by a moat. I saw numerous nests placed on the bamboos about ten feet from the ground; they were made of twigs and were small and flat. We took one clutch of four eggs, all the other nests which we saw being empty. The owner of the house had taken the eggs for food.

205. DUPETOR FLAVICOLLIS Lath.

The Yellow-necked Heron is abundant during summer,

Styan, Ibis, 1891, p. 492; La Touche & Rickett, Ibis, 1905, p. 66.

and breeds in the reed-beds and in patches of bulrushes in the ponds. I procured eggs in June and July, most of which were brought to me by natives. On June 18 I found a nest placed on a pollard willow growing on the bank of a creek in the midst of a reed-bed. It was flat and composed of sticks, with a depression about an inch in depth. There were five eggs, much incubated, which I did not take.

206. Ardetta sinensis (Gm.).

Styan, Ibis, 1891, p. 492; La Touche & Rickett, Ibis, 1905, p. 66.

The Chinese Little Bittern is extremely plentiful during summer. It nests chiefly in the reed-beds and in patches of bulrushes growing in the ponds. The nest, made of dry reed-leaves and dry bulrushes, is attached to the vegetation by bits of the material composing it, these being strongly twisted and worked round the supporting reeds or flags. The measurements of a nest taken on June 8 were: outer height about 5 in., outer diameter about 7 in., depth of egg-cavity $1-1\frac{1}{2}$ in. There was an attempt at a lining, made of a few broken strips of reed-leaves. I obtained eggs throughout June and nearly to the end of July. The usual number in a clutch is four. The colour is greenish white, and the most usual shape oval. Thirty-six eggs average $1.25 \times 0.96''$. An exceptionally large specimen measures $1.36 \times 1.00''$, the next largest being $1.33 \times 1''$, and the smallest $1.1 \times 80.90''$. I heard during summer, in a marshy field more or less covered with reeds and sedges, a strange moaning sound which I believe to have been the call of this bird.

207. Ardetta cinnamomea (Gm.).

Styan, Ibis, 1891, p. 493.

I did not secure a specimen of the Cinnamon Heron at Chinkiang, but I once saw a small Heron which appeared to belong to this species. It would seem, however, to breed commonly on the north bank of the river, as on July 11 and 13 a number of eggs, which were apparently those of this bird, were brought to me. I was told that they

had been found among reeds or rushes in nests lying on or near narrow paths in flooded rice-fields. I visited the place five days afterwards, but saw neither Herons nor nests. The eggs, which are pure white without a tinge of green, are mostly oval, and range in size from $1.29 \times 0.98''$ to $1.40 \times 1.03''$.

208. ARDETTA EURYTHMA Swinhoe. Styan, Ibis, 1891, p. 493. Passes in April and May.

209. NYCTICORAX GRISEUS (L.). Styan, Ibis, 1891, p. 493. Common in summer.

210. BOTAURUS STELLARIS (L.). Styan, Ibis, 1891, p. 493. Found in reed-beds in winter.

211. CYGNUS BEWICKI Yarr.

Cygnus minor Pall.; Styan, Ibis, 1891, p. 494.

The skin of an immature bird was sold to me by a native, who said that he had shot the bird somewhere up the canal.

212. ANSER RUBRIROSTRIS Hodgs. Anser cinereus Meyer & Wolf; Styan, Ibis, 1891, p. 495.

213. Anser SERRIROSTRIS Swinhoe. Anser segetum (Gm.); Styan, Ibis, 1891, p. 495.

214. ANSER ALBIFRONS (Gm.). Styan, Ibis, 1891, p. 494.

These three kinds of Geese are found in winter near Chinkiang. I have shot one of each of the two latter species.

215. Nettapus coromandelianus (Gm.).

Styan, Ibis, 1891, p. 495.

Very common in summer from the end of May. I was unable to procure eggs, nor could I find a single nest.

216. Anas boscas L.

Styan, Ibis, 1891, p. 496.

Abundant in winter. In 1902 I saw it in the flooded

fields as late as April 24. The winter of 1901–1902 was a very good season at Chinkiang for wild-fowl. Much water remained in the fields from the previous summer's floods, the cold was severe, and quantities of Ducks and Teal frequented the wet fields and inland ponds.

217. ANAS ZONORHYNCHA Swinhoe.
Styan, Ibis, 1891, p. 496; La Touche & Rickett, Ibis, 1905, p. 67.
Resident. Abundant in winter.

218. DAFILA ACUTA (L.). Styan, Ibis, 1891, p. 496. Abundant in winter.

219. ÆX GALERICULATA (L.). Styan, Ibis, 1891, p. 496.

Several examples were shot or netted during the winter of 1901–1902. The collectors saw three on April 22, and a small party of Ducks seen by me on April 19 were, I believe, of this species.

220. NETTIUM FORMOSUM (Georgi).

Styan, Ibis, 1891, p. 497.

This Teal was very common during the season of 1901–1902 on the flooded fields. I shot one as late as March 23.

221. NETTIUM CRECCA (L.).

Styan, Ibis, 1891, p. 496.

Very abundant in winter, arriving early and remaining until late in spring.

222. QUERQUEDULA CIRCIA (L.).

Styan, Ibis, 1891, p. 496.

The only individual of this species which I have seen at Chinkiang was a male resembling the semi-albino procured by me at Foochow (see 'Ibis,' 1892; p. 492). It was shot by the collectors on April 24.

223. SPATULA CLYPEATA (L.). Styan, Ibis, 1891, p. 497.

I shot one female on March 9.

224. CLANGULA GLAUCION (L.). Styan, Ibis, 1891, p. 497.

I saw a small party of these Ducks on a pond on December 29, 1901, and shot a fine male in full plumage.

225. MERGUS ALBELLUS (L.). Styan, Ibis, 1891, p. 498. Common in winter.

226. MERGUS MERGANSER L. Styan, Ibis, 1891, p. 498. Verv common in winter.

227. Podicipes philippensis Bonn.

Podicipes minor (Briss.); Styan, Ibis, 1891, p. 510.

A very common resident species. Numbers breed in the ponds in the country from the end of May until far into July, and I obtained eggs from May 29 to July 13. The nests which I found were floating truncated pyramids of weeds. The full clutch consists of six or seven eggs. When quite fresh they are greenish white, but become creamy white after a short time, the colour deepening until at the moment of hatching it is of a dull brown. The general shape of the eggs is biconical, one end being more pointed than the other ; a few are oval with both ends more or less pointed. Thirty-three eggs average $1.45 \times 1.02''$. They range in size from $1.39 \times 1''$ to $1.54 \times 1.03''$. The diameter in some is only 0.98'', but in one case it is as much as 1.06''.

One of four brown eggs, taken on June 23, hatched in my room the following night, and the next day I found the young bird crawling about the floor. When put into a basin of water it swam rapidly like a frog, but with the head and bill pointing downwards (probably through having sustained some injury), and when deposited on a table it crawled rapidly on all fours in the same way. The bill of this bird was pink, the iris was light chestnut, and the legs were plumbeous grey. I opened two of the remaining eggs and took out the young, which were alive. They were much less advanced than the hatched bird. The most forward would probably have been hatched next day, but the other had no scales on its legs, and would probably not have come out for four days *.

II.—On the Birds of Gazaland, Southern Rhodesia. By C. F. M. SWYNNERTON.

(Plate I.)

ALTHOUGH the greater portion of the high veld of Gazaland is now included politically in Mashonaland, under the name of the "Melsetter District," from a scientific point of view, and from the view of the natives, Gazaland (the country conquered at the commencement of the last century by Mauikusa and his Zulus-the "Aba-Gaza") constitutes a very distinct district, characterized by the irruption of many trans-Zambezian forms and in parts by its richer and more varied vegetation. The highlands under the rule of the Chartered Company are separated from Mashonaland proper by the Umvumvumvu River on the north and by the Sabi (here a wide sand-river, flowing at the bottom of a hot dry valley at an elevation of about 1000 feet) on the west. They consist of grassy mountains, varying from 3000 feet in parts of Southern Melsetter to the 8000 feet or more of the rugged Chimanimani range, the whole being well watered by numerous permanent streams and so varied in character as to afford an unusually interesting field for the naturalist, whatever his special hobby may be. Much of the country, especially at the higher elevations, is open and covered with short turf,

* A single egg which I found on July 5, and thought at first was the egg of this Grebe, is so much larger than any of the eggs described above that I do not think it can be an egg of the Dabchick. It might belong to *P. nigricollis*, although I have never seen that species at Chinkiang. It measures $1.61 \times 1.04''$. It is greenish white, and its shape is narrowly oval, with one end much pointed.